FIG. 1

FIG. 2

"STOP CYCLE"	M 1	L 1
"PREPARE CYCLE"	M 2	L 2
"DIAGNOSE ALARM"	M 3	L 3
⋮		⋮
	M i	L i
⋮		⋮

23 b

23 a

X   G 1   X   G 2   X   G 3

1	y	z

g 1 1

2	y	z

g 1 2

1	y	z

g 1 3

3	y	z

g 1 4

1	y	z

g 1 5

3	y	z

g 1 6

1	y	z

2	y	z

1	y	z

3	y	z

2	y	z

3	y	z

3	y	z

1	y	z

2	y	z

1	y	z

3	y	z

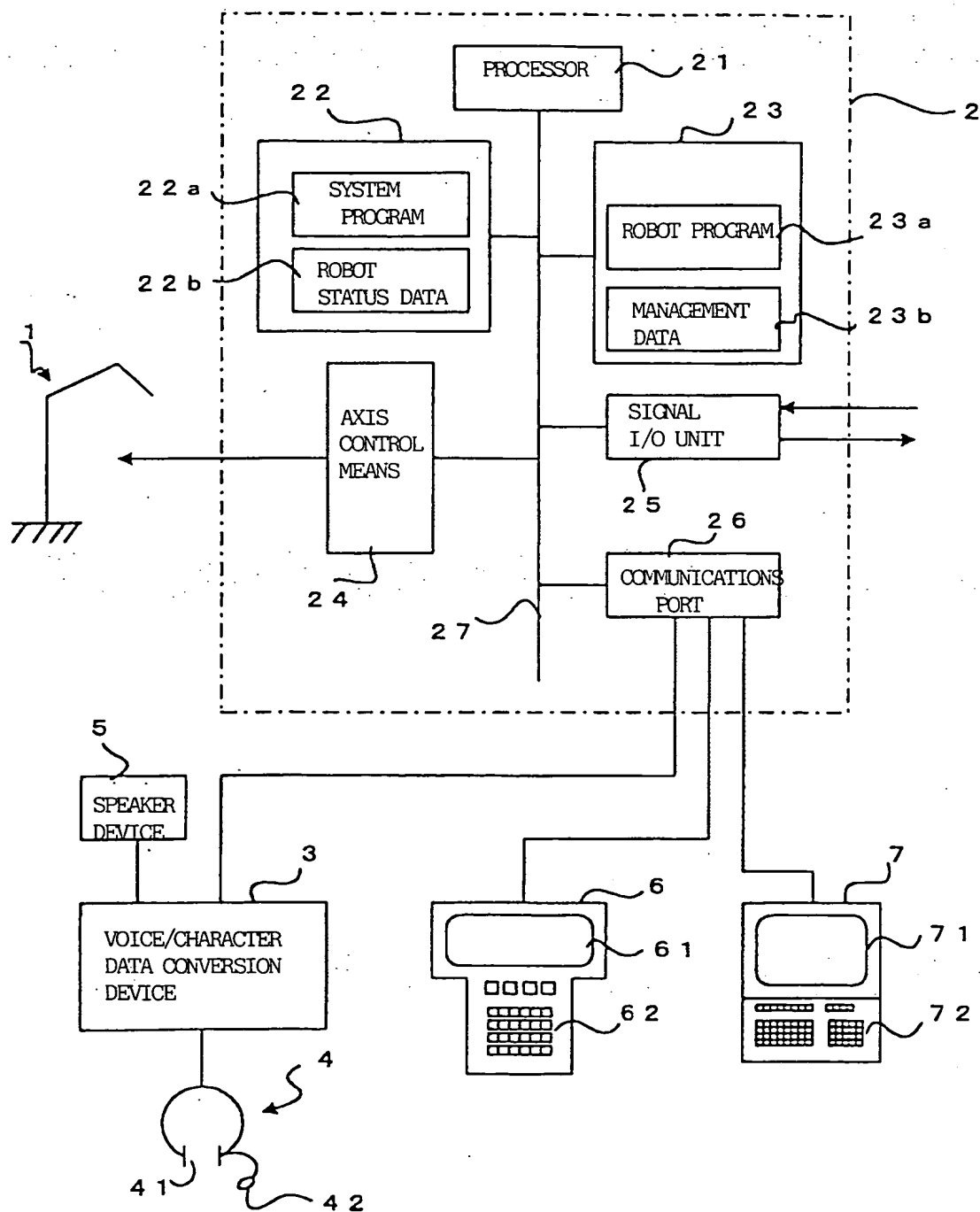| 4	y	z

FIG. 3

FIG. 4

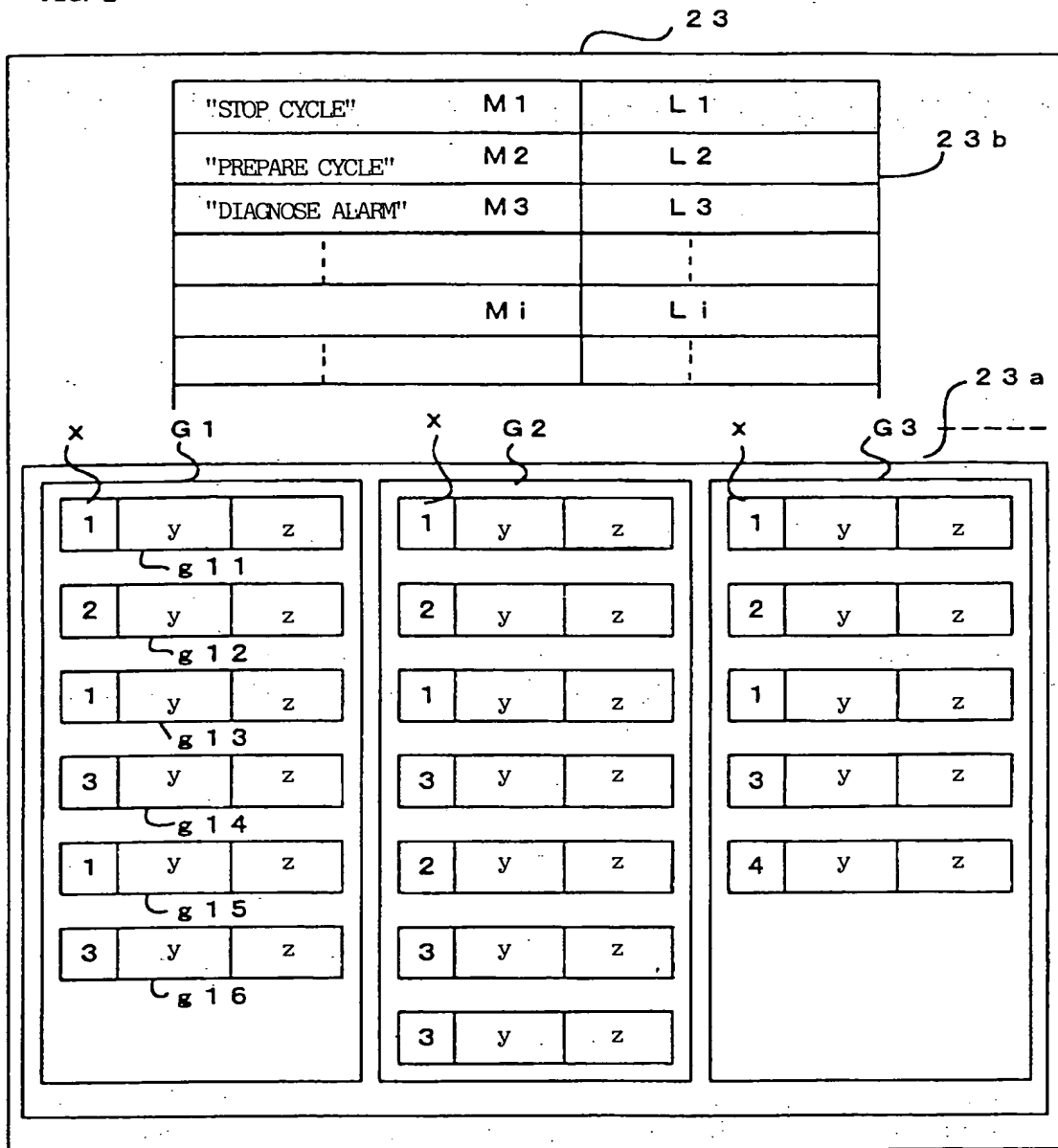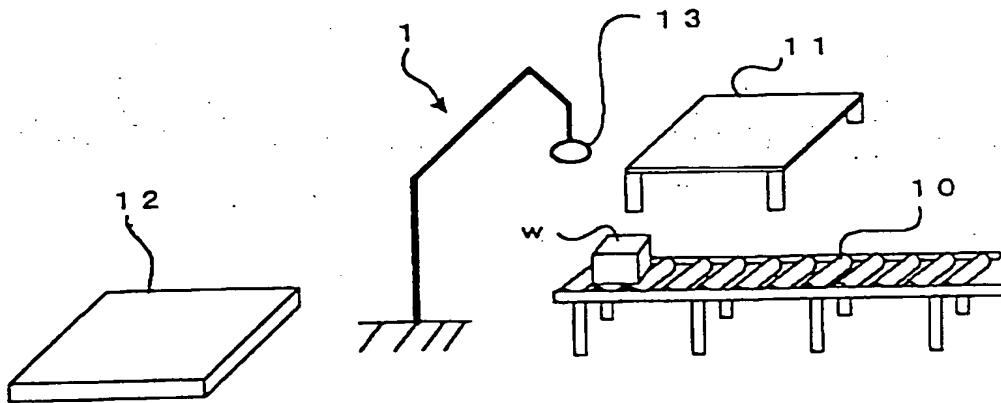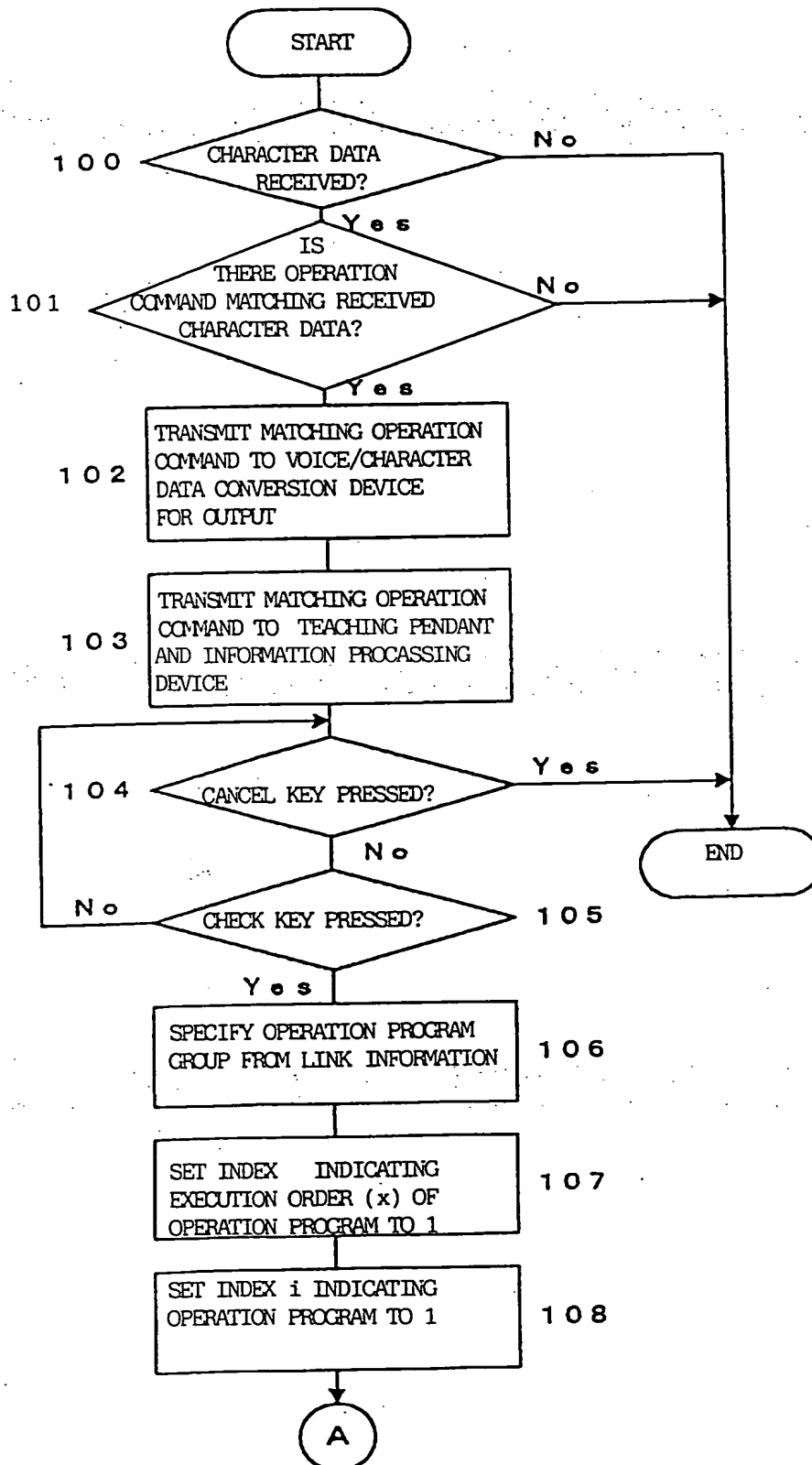|	x	y	z
1	ROBOT DOES NOT HOLD WORKPIECE	STOP ROBOT	
2	LIFT WORKPIECE	LOWER AND PLACE WORKPIECE ON PROVISIONAL TABLE	
2	HORIZONTALLY MOVE WORKPIECE	CONTINUE MOVING WORKPIECE AND PLACE IT ON PALLET	
2	LOWER WORKPIECE	CONTINUE LOWERING WORKPIECE AND PLACE IT ON PALLET	
3	HOLD WORKPIECE	RELEASE WORKPIECE AND STOP OPERATION	

FIG. 5

```
                    ┌──────────┐
                    │  START   │
                    └──────────┘
                          │
                          ▼
            ╱────────────────────────╲         No
  1 0 0   ╱   CHARACTER DATA           ╲ ─────────────────┐
          ╲   RECEIVED?                ╱                  │
            ╲────────────────────────╱                   │
                      │ Yes                               │
                      ▼                                   │
            ╱────────────────────────╲                    │
          ╱         IS                ╲        No          │
  1 0 1 ╱   THERE OPERATION            ╲ ───────────────┐  │
        ╲  COMMAND MATCHING RECEIVED   ╱                │  │
          ╲  CHARACTER DATA?          ╱                 │  │
            ╲────────────────────────╱                  │  │
                    │ Yes                                │  │
                    ▼                                    │  │
        ┌──────────────────────────────┐                │  │
        │ TRANSMIT MATCHING OPERATION   │                │  │
  1 0 2 │ COMMAND TO VOICE/CHARACTER    │                │  │
        │ DATA CONVERSION DEVICE        │                │  │
        │ FOR OUTPUT                    │                │  │
        └──────────────────────────────┘                │  │
                    │                                    │  │
                    ▼                                    │  │
        ┌──────────────────────────────┐                │  │
        │ TRANSMIT MATCHING OPERATION   │                │  │
  1 0 3 │ COMMAND TO TEACHING PENDANT   │                │  │
        │ AND INFORMATION PROCASSING    │                │  │
        │ DEVICE                        │                │  │
        └──────────────────────────────┘                │  │
                    │                                    │  │
           ┌────────▼────────╲              Yes          │  │
  1 0 4    │  CANCEL KEY PRESSED? ╲ ────────────────────┐│  │
           ╲                  ╱                         ││  │
            ╲────────────────╱                          ││  │
                    │ No                                ││  │
                    ▼                                   ▼▼  ▼
           ╱────────────────╲                        ┌──────────┐
    No    ╱ CHECK KEY PRESSED? ╲   1 0 5              │   END    │
  ┌───────╲                  ╱                        └──────────┘
  │         ╲──────────────╱
  │               │ Yes
  │               ▼
  │     ┌──────────────────────────────┐
  │     │ SPECIFY OPERATION PROGRAM     │  1 0 6
  │     │ GROUP FROM LINK INFORMATION   │
  │     └──────────────────────────────┘
  │               │
  │               ▼
  │     ┌──────────────────────────────┐
  │     │ SET INDEX    INDICATING       │  1 0 7
  │     │ EXECUTION ORDER (x) OF        │
  │     │ OPERATION PROGRAM TO 1        │
  │     └──────────────────────────────┘
  │               │
  │               ▼
  │     ┌──────────────────────────────┐
  │     │ SET INDEX i INDICATING        │  1 0 8
  │     │ OPERATION PROGRAM TO 1        │
  │     └──────────────────────────────┘
  │               │
  │               ▼
  │            ┌──────┐
  └────────────│  A   │
               └──────┘
```

FIG. 6